

Petri Dish Agar Recipe

Materials:

Agar Powder
Distilled Water
Flask or Beaker
Glass Stir Rod
Lab Thermometer
Sterile Petri Dishes (plastic or glass)*
Heat Resistant Hand Protection



* Note: keep sterile petri dishes closed until ready to pour the agar into them

Agar	+	Distilled Water	=	Yield
23g		1000ml		50 Plates
11.5g		500ml		25 Plates
9.2g		400ml		20 Plates
4.6g		200ml		10 Plates

Procedure:

1. Measure agar and distilled water into clean flask or beaker.
2. Flame sterilize a clean glass stir rod to stir the medium as it melts
3. While wearing heat resistant hand protection, hold the flask or beaker over the flame. Swish or stir the mixture constantly while heating.
4. Boil the mixture for 1 minute. Remove from heat.
5. Place a sterile lab thermometer in the mixture and monitor the temperature until it falls to approximately 45-50° C or if lab thermometer is not available, cover an let stand for a few minutes.
6. Pour enough melted agar into each sterile petri dish to cover the bottom - about 1/8" to 1/4" deep. Replace the lid immediately.
7. Place agar plates on a counter top to cool and set. Agar medium will set like stiff gelatin at room temperature.
8. Once cool - the agar medium is ready for storage or use.

Storage:

Stack agar plates upside down in the refrigerator. Do Not Freeze! The purpose of placing the plates upside down is to prevent condensation from dripping down onto the agar surface which could then facilitate movement of organisms between colonies.